

Having described the invention, what is claimed is:

1. A method of manufacturing a flow connector, comprising:
providing at least one insert of a composition comprising at least one polymer, the insert having a threaded bore for attachment to a threaded flow conduit, and
molding onto the at least one insert a composition comprising at least one polymer to form a flow connector having a wall thickness defining an internal cavity and comprising at least one aperture defined by the at least one insert through the wall thickness.
2. The method of manufacturing a flow connector according to claim 1 wherein the at least one polymer of the at least one insert is the same as the at least one polymer of the flow connector.
3. The method of manufacturing a flow connector according to claim 1 wherein the at least one polymer of the at least one insert and the at least one polymer of the flow connector are similar polymers that permit remelting and subsequent bonding at the interface between the at least one insert and the flow connector.
4. The method of manufacturing a flow connector according to claim 1 wherein the at least one insert comprises a reinforcement material selected from the group consisting of fiberglass, an inert material, and combinations thereof.
5. The method of manufacturing a flow connector according to claim 4 wherein the reinforcement material is oriented circumferentially around the threaded bore of the insert.

6. The method of manufacturing a flow connector according to claim 1 wherein the molded flow connector defines a manifold body for fluid handling.
7. The method of manufacturing a flow connector according to claim 6 wherein the at least one aperture is a flow opening located in the manifold body.
8. The method of manufacturing a flow connector according to claim 1 wherein the molding is performed by injection molding.
9. The method of manufacturing a flow connector according to claim 8 wherein the injection molding is performed by providing the at least one insert on at least one corresponding core pin inside a mold in which the flow connector is molded.
10. The method of manufacturing a flow connector according to claim 1 wherein the at least one insert comprises circumferential grooves located on an exterior surface disposed around the threaded bore.
11. The method of manufacturing a flow connector according to claim 1 wherein the at least one insert comprises spurs located on an exterior surface disposed around the threaded bore.
12. The product-produced-by-the-method according to claim 1.
13. The product-produced-by-the-method according to claim 6.
14. The product-produced-by-the-method according to claim 10.

15. The product-produced-by-the-method according to claim 11.
16. An insert for manufacturing a flow connector, comprising:
a threaded bore for attachment to a threaded flow conduit, the insert being of a composition comprising at least one polymer.
17. The insert according to claim 16 further comprising circumferential grooves located on an exterior surface disposed around the threaded bore.
18. The insert according to claim 16 further comprising spurs located on an exterior surface disposed around the threaded bore.
19. The insert according to claim 16 wherein the at least one insert comprises a reinforcement material selected from the group consisting of fiberglass, an inert material, and combinations thereof.
20. The insert according to claim 19 wherein the reinforcement material is oriented circumferentially around the threaded bore of the insert.